

**Work Order ID 70007**

Wednesday, May 25, 2011 12:01:23 PM



Page 1

Item ID: D350-689-023

Accept



Setup Start



Revision ID:

Stop



Item Name: Energy Attenuating Floor Provisions

Start Date: 5/25/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 6/10/2011 Req'd Qty: 2.00

Customer:

Reference:

Approvals: Process Plan: CL Date: 11/05/25 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
DSI D9419	Rev A								

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile and create labels per PPP D350-689-023 CHG002

*Sulador**ck for ch 11/05/20*

110

0.00



Pick Kit

Packaging

Memo

0.00

Packaging

*JB* *CL* *11/06/01*

120

0.00



QC4- 100% Inspect kits for completeness

QC

Memo

0.00

Quality Control

*Sulador**@*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action      Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Work Order ID 70007**

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Page 2

Item ID: D350-689-023

Accept



Setup Start



Revision ID:

Stop



Item Name: Energy Attenuating Floor Provisions

Start Date: 5/25/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 6/10/2011 Req'd Qty: 2.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID..	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00							
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D350-689-023								
	Location: _____								
	PPP Rev: <u>A</u>								
140	QC21 - Final Inspection - Work Order Release	0.00							
QC	Memo	0.00							
Quality Control									

10/6/10 (2)

CK 11/06/10

ME

11-06-10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Wednesday, May 25, 2011 12:01:20 PM

**Parent Item:** D350-689-023

**Parent Item Name:** Energy Attenuating Floor Provisions





**Start Date:** 5/25/2011

**Required Date:** 6/10/2011

**Start Qty: 2.00**

**Required Qty: 2.00**

**Comments:** IPP Rev:A 08-12-23 new issue DD verified by:EC  
route seq DD 10.02.12 vrfied byJLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN960JD10 	NAS1149D0363J	Purchased	No			110	Each	0.0000	9	18	✓		
Washer D3025-1 		Manufactured	No			110	Each	6.0000	1	2	✓		
Beam													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST177		6							
				69612		6				69612			
D3026-1 		Manufactured	No			110	Each	5.0000	1	2	✓		
Channel													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST177		5							
				68754		-2							
				69428		6							
				69806		1				69806x1			
D3027-1 		Manufactured	No			110	Each	20.0000	1	2	✓		
Clip													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST031		20							
				22566		20				22566			

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Wednesday, May 25, 2011 12:01:20 PM

Page 2

Work Order ID: 70007

Parent Item: D350-689-023

Parent Item Name: Energy Attenuating Floor Provisions

Start Date: 5/25/2011

Required Date: 6/10/2011

Start Qty: 2.00

Required Qty: 2.00

D3027-3 Manufactured No

110 Each

12.0000

1

2

✓

S<sub>72</sub>  
Clip

Location

Loc Qty

Loc Code

ST031

12

22566

12

22566

D3027-5 Manufactured No

110 Each

16.0000

1

2

✓

S<sub>71</sub>  
Clip

Location

Loc Qty

Loc Code

ST031

16

22566

16

22566

D3027-7 Manufactured No

110 Each

8.0000

4

8

✓

S<sub>72</sub>  
Clip

Location

Loc Qty

Loc Code

ST031

8

68755

8

68755

D3234-1 Manufactured No

110 Each

3.0000

1

2

✓

S<sub>72</sub>  
Doubler

Location

Loc Qty

Loc Code

ST233

3

44165

3

44165

D3234-3 Manufactured No

110 Each

4.0000

1

2

✓

S<sub>72</sub>  
Doubler

Location

Loc Qty

Loc Code

ST233

4

44166

4

44166

Wednesday, May 25, 2011 12:01:20 PM

Shop Packet Print

Page 2

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

Wednesday, May 25, 2011 12:01:20 PM

Page 3

Work Order ID: 70007

Parent Item: D350-689-023

Parent Item Name: Energy Attenuating Floor Provisions

Start Date: 5/25/2011

Required Date: 6/10/2011

Start Qty: 2.00

Required Qty: 2.00

D3811-041 Manufactured No

110 Each 1.0000

1

2 ✓

Seat Track Assembly



70008x1 JB

Handwritten signature

## Location

## Loc Qty

## Loc Code

ST263

1

69440

1

110

Each

5,772.000

14

69440 x1  
28 ✓

MS20426AD4-5

Purchased

No

Rivet



JB Handwritten signature

## Location

## Loc Qty

## Loc Code

MEZZ

483

6733

483

ST317

5289

6874

5289

110

Each

1,122.000

34

68 ✓

MS20470AD4-5

Purchased

No

Rivet, Universal Head



JB Handwritten signature

## Location

## Loc Qty

## Loc Code

ST319

1122

116893

1122

110

Each

2,565.000

18

36 ✓

MS20470AD4-6

Purchased

No

Rivet, Universal Head



116893

JB 11/06/01 Handwritten signature

## Location

## Loc Qty

## Loc Code

ST319

2565

117395

2565

117395

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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# Picklist Print

Wednesday, May 25, 2011 12:01:20 PM

Page 4

Work Order ID: 70007

Parent Item: D350-689-023

Parent Item Name: Energy Attenuating Floor Provisions

Start Date: 5/25/2011

Required Date: 6/10/2011

Start Qty: 2.00

Required Qty: 2.00

MS20470AD5-6

Purchased

No

110

Each

1,468.000

32

64



Rivet

Location

Loc Qty

Loc Code

ST320

1468

105433

1468

110

Each

2,172.000

9

18

MS21042L3

Purchased

No



Nut

Location

Loc Qty

Loc Code

ST300

2172

116391

11

116540

195

116549

766

117441

800

117601

400

110

Each

119.0000

9

18

MS24694-S50

Purchased

No



Screw

Location

Loc Qty

Loc Code

ST289

50

117739

50

ST298

69

116900

69

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

# DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D350-689 REV. A  
AND FLIGHT MANUAL SUPPLEMENT FMS-D350-689 REV. A  
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-689 REV. 0  
REF. CANADIAN STC: SH02-33  
REF. FAA STC: SR01620NY

**REFERENCE ONLY**

## PURPOSE

The purpose of this DSI is to add the D350-689-021 Dual High Back Seat Installation, LH, the D350-689-023 Floor Provisions Kit and the D350-689-043 Dual High Back Seat Assembly to IIN-D350-689 Rev. A. The D350-689-021/-023 Kits are compatible with the Energy Attenuating Seat rails in later AS 350/355 model aircraft.

The DSI 9419-011 Kit includes the parts that are required to convert a D350-689-011 installation into a D350-689-021 installation.

## PART LIST




-011	-021	-023	-043	P/N	DESCRIPTION
X				DSI 9419-011	ENERGY ATTENUATING CONVERSION KIT
	X			D350-689-021	DUAL HIGH BACK SEAT INSTALLATION, LH
	1	X		D350-689-023	ENERGY ATTENUATING FLOOR PROVISIONS KIT
	1		X	D350-689-043	DUAL HIGH BACK SEAT ASSEMBLY
			2	D3016-041	SEAT FRAME ASSEMBLY
			1	D3017-041	BACK FRAME ASSEMBLY
	1			D3018-1	SEAT CUSHION
	1			D3019-1	BACK CUSHION
			1	D3021-041	TUBE ASSEMBLY
			1	D3022-1	SEAT PAN
			1	D3023-1	BACK PANEL
			3	D3024-1	SPACER
		1		D3025-1	BEAM
		1		D3026-1	CHANNEL
		1		D3027-1	CLIP
		1		D3027-3	CLIP
		1		D3027-5	CLIP
		4		D3027-7	CLIP
			2	D3031-1	LOOP
1		1		D3234-1	DOUBLER
1		1		D3234-3	DOUBLER
2			2	D3808-041	SEAT RAIL ASSEMBLY
4			4	D3809-1	SLIDING BLOCK
1		1		D3811-041	SEAT TRACK ASSEMBLY

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

**APPROVED**

BY:   
D. SHEPHERD (DE # 02)

DATE: Aug. 19/2008  
CERT. NO.: SH02-33  
ISSUE NO.: 1

A	NEW ISSUE	RF	08.08.19
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	<b>DSI 9419</b>	SHEET 1 OF 5
APPROVED		TITLE	SCALE
DE APPR.		ENERGY ATTENUATING PROVISION KIT	NTS
DATE	08.08.19	COPYRIGHT © 2008 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	



-011	-021	-023	-043	P/N	DESCRIPTION
			3	AN3-12A	BOLT
14		14		MS20426AD4-5	RIVET
34		34		MS20470AD4-5	RIVET
18		18		MS20470AD4-6	RIVET
		32		MS20470AD5-6	RIVET
			40	MS20600AD4W2	RIVET
			6	MS20600AD4W3	RIVET
9		9	23	MS21042L3	NUT (or MS21042-3)
			4	MS24693-S272	SCREW
8			8	MS24694-S3	SCREW
9		9		MS24694-S50	SCREW
4			4	MS24694-S148	SCREW
			4	MS27039-1-17	SCREW
			12	MS27039-1-19	SCREW
			23	NAS1149D0332J	WASHER (or AN960JD10L)
9		9		NAS1149D0363J	WASHER (or AN960JD10)

## PROCEDURE




1. Install the under floor structure as outlined in steps 1-18 of IIN-D350-689 Rev. A and DSI 9311 Rev. A as applicable, except do not install D3032-1 Spacers. Attach D3026-1 Channel to floor using (14) MS20426AD4 rivets. Ensure D3234-1/-3 Doublers are installed per DSI 9269 Rev. A.
2. Position the D3811-041 Seat Track Assy at LBL 27.33 as shown in Figure 1 to be in-line with the existing seat rails at LBL 8.98 and LBL 19.16.
3. Transfer the attachment holes from D3811-041 Seat Track Assy to aircraft floor (9 pls) using a  $\varnothing 0.201$  (#7 drill). Deburr holes. Install D3811-041 using (9) MS24694-S50 screws, (9) NAS1149D0363J washers, and (9) MS21042L3 nuts as shown in Figure 1. Torque screws to 20 to 25 in-lbs (2.3 to 2.8 Nm).
4. If converting a -041 Seat Assembly to a -043 Seat Assembly, remove D3028-1 Studs, D3029-1 Springs, and D3030-1 Locks from the D350-689-041 Seat Assembly. Install (2) D3808-041 Seat Rails Assemblies as shown in Figure 1 Detail A using (4) MS24694-S148 Screws. Torque screws to 100 to 140 in-lbs (11.3 to 15.8 Nm). Install D3809-1 Sliding Blocks using (2) MS24694-S3 screws as shown in Figure 1 Detail A. Torque screws to 12 to 15 in-lbs (1.4 to 1.7 Nm).
5. Remove screws from back end of Seat Tracks at LBL 27.33 and LBL 8.98. Slide D350-689-043 Seat Assembly into both seat tracks and lock in desired position using D3810-1 Retractable Spring Plungers. Re-install screws on back of seat tracks per the Aircraft Maintenance Manual.

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED

BY:   
D. SHEPHERD (DE # 02)

DATE: Aug. 19/2008  
CERT. NO.: SH02-33  
ISSUE NO.: 1

DESIGN	RF	<b>DART AEROSPACE LTD</b>	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	<b>DSI 9419</b>	SHEET 2 OF 5
APPROVED		TITLE	SCALE
DE APPR.		<b>ENERGY ATTENUATING PROVISION KIT</b>	NTS
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